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USF Report No. 12.22.1304

Building Damage Evaluation

Supplementary Report

Location of Loss:
Ramey Residential Building
24 Michigan Street
Long Beach, New York 11561-1309

Claim No. 12-13381

Prepared for:
Fidelity National Property and Casualty Insurance Company
P.O. Box 33064
St. Petersburg, Florida 33733-8064

Prepared by:
U.S. Forensic, LLC
3300 West Esplanade Avenue, Suite 601
Metairie, Louisiana 70002

Engineer of Record:
George Hernemar, P.E.
New York Registration No. 088718

EXHIBIT
9

Table of Contents

Results and Conclusions

Based upon the information obtained and considered to date, we offer the following opinions:

1) The physical evidence observed at the property indicated that the subject building was not structurally damaged by hydrodynamic forces, hydrostatic forces, scour or erosion of the supporting soils, or buoyancy forces of the floodwaters associated with the subject flood event.

2) The physical evidence observed at the subject property indicated that the uneven roof slopes, leaning exterior walls and the uneven floor surfaces within the interior of the building, were the result of long term differential movement of the building and foundation that was caused by long-term differential movement of the supporting soils at the site and long-term deflection of the building framing.

3) The removal of deposited waterborne sand along the south perimeter of the building and the opening up of a hole in the interior floor since our previous inspection made a thorough inspection of the foundation system possible. We observed no evidence or indications of recent movement, distortion or shifting of the foundation system of the subject building consistent with the application of hydrodynamic forces or hydrostatic forces from floodwaters. No evidence of recent shifting or movement of the floor framing members or foundation components was observed beneath the subject building.

A important

4) .In order to repair the damages of the façade siding on the south side of the building, approximately 30 sf of the stucco siding on the foundation wall and the two lowest façade panels (approximately 45 sf) should be replaced

Introduction

After our site inspection of the building located at 24 Michigan Street in Long Beach, New York performed on December 4, 2012 and after our completion of our Damage Evaluation Report, we were requested by the insured to do a second site inspection. The insured claimed new physical evidence came to light after waterborne sand was removed from the perimeter of the building. The re-inspection was performed by George Hernemar, P.E. on January 25, 2013.

Site Observations

Since our previous inspection, waterborne sand along the buildings south perimeter had been removed and in the interior and adjacent to the south-west corner of the building, a hole had been cut in the floor surface.

The removal of the water born sand made it now possible to inspect the foundation wall along the south wall. The foundation wall along the south perimeter of the building was observed to be constructed of horizontally lapped wood planks. The outside of the planks was covered with board a layer of stucco. Approximately 10 feet of that stucco siding on the foundation wall on the south side of the building had been damaged.

On our previous inspection, the only entrance to the crawl space was blocked by a tank inside the crawl space. The hole in the interior floor that had been cut since our previous inspection now enabled us a thorough inspection of the foundation system and the floor structure.

Some deposits of waterborne sand were observed in the crawlspace close to the south-west corner of the building.

The foundation wall along the west perimeter of the building was noted to be partly constructed of concrete masonry unit (CMU) blocks and partly constructed of wood planks. The regular pattern of supporting piers appeared to be broken in the area adjacent to the south-west corner. On many locations, vertical wooden piers appear to have been successively added to the foundation system.

We observed no evidence or indications of recent movement, distortion or shifting of the foundation system of the subject building consistent with the application of hydrodynamic forces or hydrostatic forces from floodwaters. No evidence of recent shifting or movement of the floor framing members or foundation components was observed beneath the subject building.

We did not observe any erosion or scour of the soils around the perimeter of the subject building or in the crawlspace consistent with detrimental velocity flow.

Analyses and Discussion

Available information indicated that Long Beach, New York area experienced flooding on October 29, 2012 in connection with the passage of Hurricane Sandy. High water marks observed at the site indicated that floodwaters inundated the property, entered the crawlspace and interior living area of the building and rose approximately 6 inches above the floor surface approximately 6 inches above the

floor surface

The evidence observed at the site indicated that the property experienced depth and velocity flow of floodwaters during the subject flood event. The damage of the stucco siding of the foundation wall along the south perimeter of the building was likely caused by the impact of waterborne debris.

We observed no evidence or indications of recent movement, distortion or shifting of the foundation system of the subject building consistent with the application of hydrodynamic forces or hydrostatic forces from floodwaters. No evidence of recent shifting or movement of the floor framing members or foundation components was observed beneath the subject building. B

We observed deposits of waterborne sand inside the crawl space but we did not observe any erosion or scour of the soils inside the crawlspace or around the perimeter of the subject building or consistent with detrimental velocity flow.

We observed no evidence or indications of recent movement, distortion or shifting of the exterior walls of the subject building consistent with the application of hydrodynamic forces or hydrostatic forces from floodwaters.

The physical evidence observed at the property indicated that the subject building and foundation system were not structurally damaged by hydrodynamic forces, hydrostatic forces, scour or erosion of the surface soils, or buoyancy forces of the floodwaters associated with the reported flood event.

The noted conditions at the site including the uneven roof slopes, leaning exterior walls and the uneven floor surfaces within the interior of the building, were consistent with differential movement of the building and foundation. C

Scope of Repairs

In order to repair the damages of the façade siding on the south side of the building, approximately 30 sf of the stucco siding on the foundation wall and the two lowest façade panels (approximately 45 sf) should be replaced

Representative photographs are in the attachments. The photographs taken but not included in the report are available upon request.

This report was prepared by U.S. Forensic, L.L.C. for the exclusive use of Fidelity National Property & Casualty Insurance Company. Any other use is prohibited without the written consent of Fidelity National Property &Casualty Insurance Company and U.S. Forensic. Our opinions are based on experience, education, work performed, industry resources, engineering references, and other information acquired and listed in the **Reference Information** section of this report. We reserve the right to modify or supplement our opinions and conclusions.

Reference Information

We reviewed and utilized the following references and information when preparing this report.

1) Site inspection of the building located at 24 Michigan Street in Long Beach, New York performed on January 25, 2013 by George Hernemar, P.E. Photographs and measurements were taken in various portions of the building.

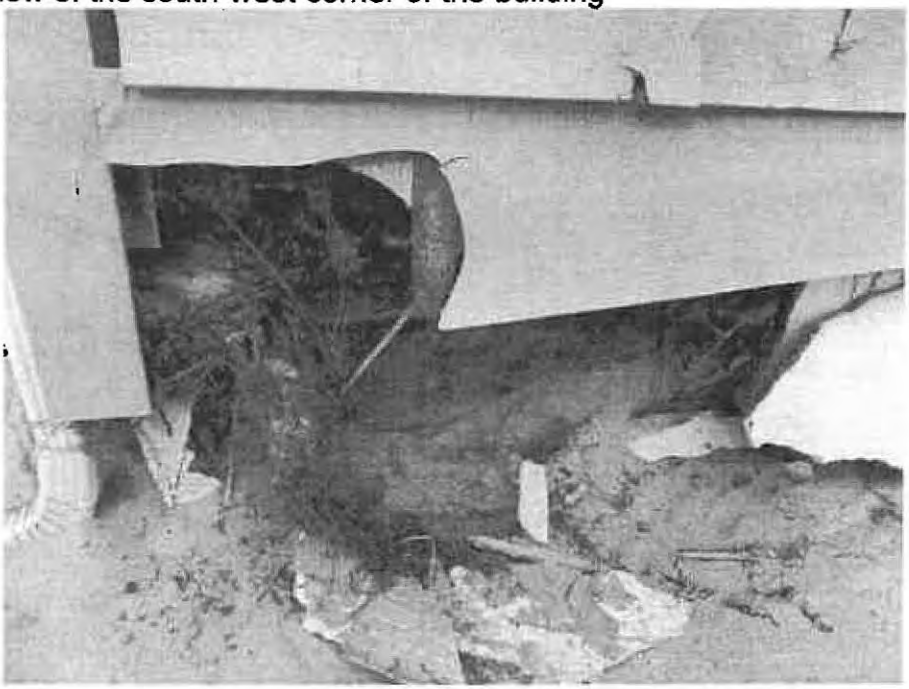
2) NRCS Soil Conservation Service Web Soil Survey for Nassau County, New York.

3) Weather data from the WeatherUnderground.com website.

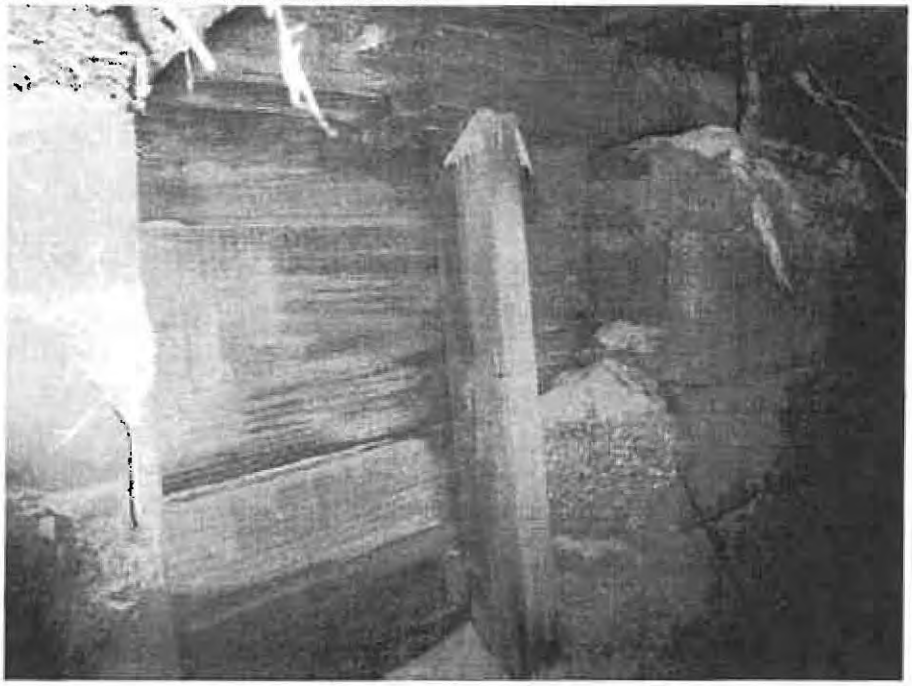
Photographs

Photograph 1
View of the south-west corner of the building.

Photograph 2
View of the south-west corner of the building



Photograph 3
View of the west foundation wall.



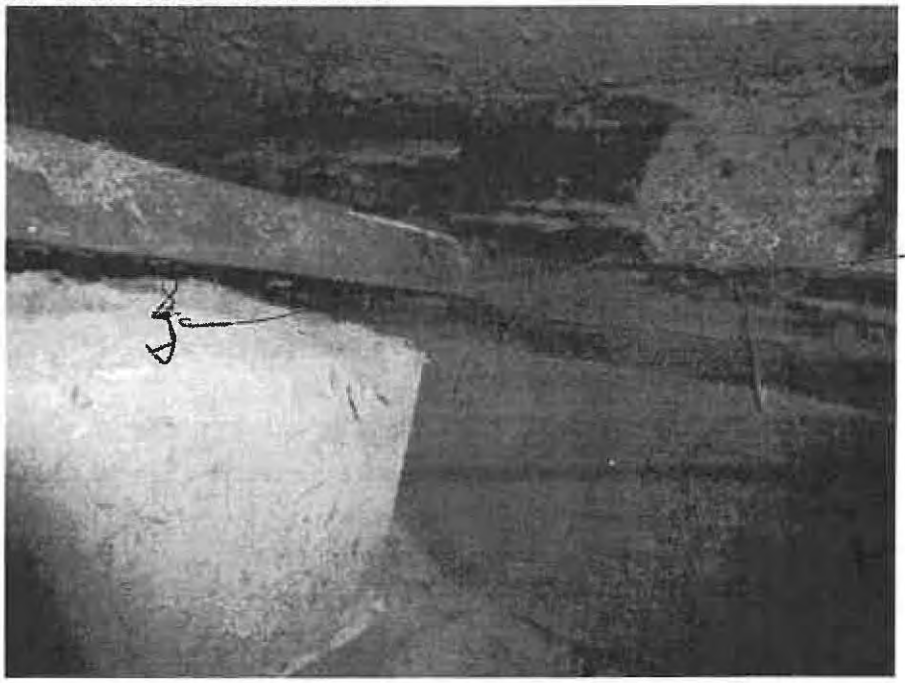
Photograph 4
View of the west foundation wall.

Photograph 5
View of the south foundation wall.

Photograph 6
View of the south foundation wall.

Photograph 7
View of the south-west corner.

Photograph 8
View of the south-west corner.



Photograph 9
View from the crawlspace.

Photograph 10
View from the crawlspace.

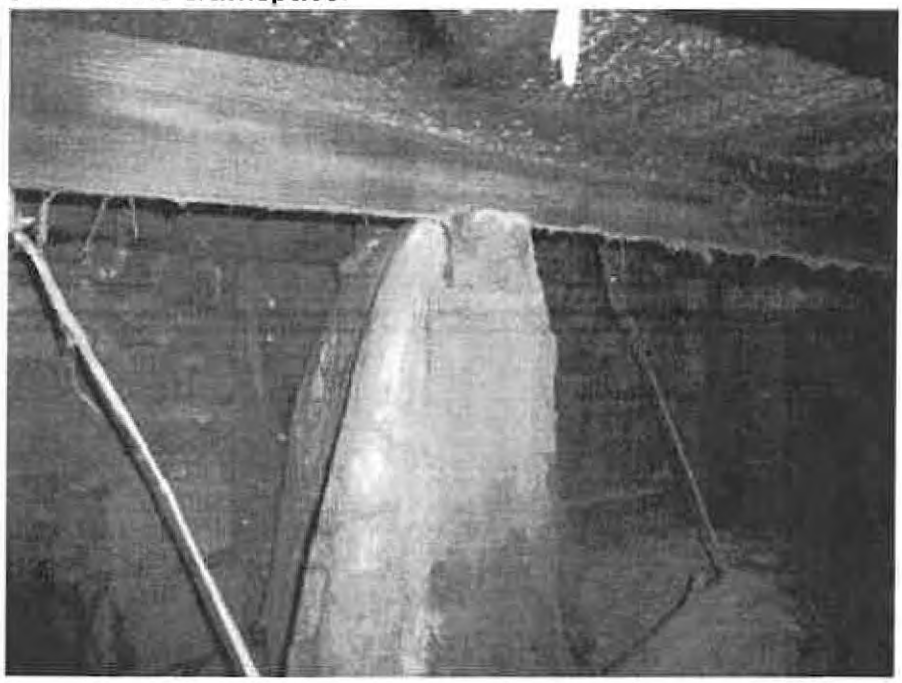
Photograph 11
View from the crawlspace.

Photograph 12
View from the crawlspace.

Photograph 13
View from the crawlspace.

Photograph 14
View from the crawlspace.

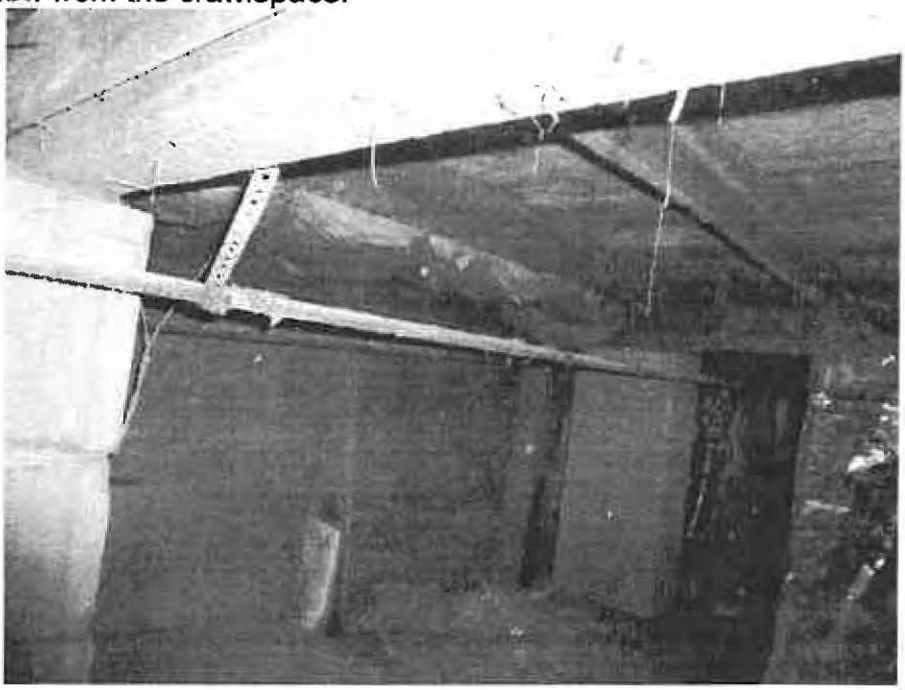
Photograph 15
View from the crawlspace.



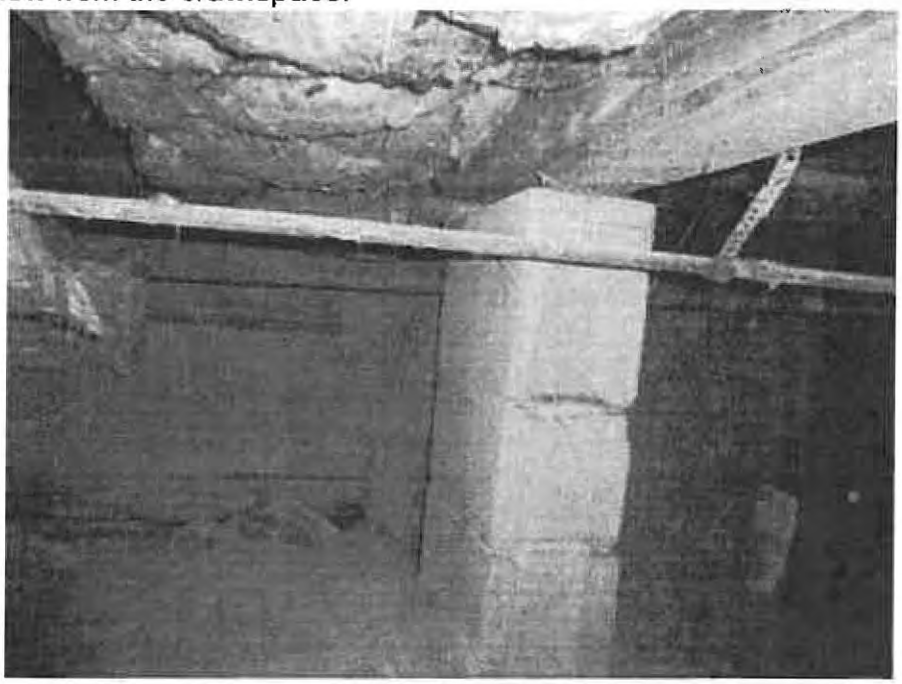
Photograph 16
View from the crawlspace.

Photograph 17
View from the crawlspace.

Photograph 18
View from the crawlspace.



Photograph 19
View from the crawlspace.



Photograph 20
View from the crawlspace.

Resume

George Hernemar., P.E.

Mr. Hernemar is a registered Professional Engineer in New York and in Connecticut and specializes in Structural Engineering. Mr. Hernemar obtained a Post Master's degree (Licentiate degree) in Structural Engineering and a Master's degree from KTH (Royal Institute of Technology, Stockholm, Sweden) Mr. Hernemar taught Structural Engineering to graduate and undergraduate students at KTH (Royal Institute of Technology, Stockholm) and at the Technical University in Berlin, Germany. Mr. Hernemar has executed research projects, audited structural designs and served as lead for the design and construction of numerous Civil and Structural engineering projects consisting of new construction, modifications to existing structures, and damage repairs. His project experience includes civil/structural engineering design and analysis for, industrial, commercial, and public sector projects. He has provided engineering consulting services for projects in the United States and in Europe including the engineering design of the material and personnel hoists for the Freedom Tower/World Trade Center, NYC.

Education:

Licentiate in Structural Engineering – KTH (The Royal Institute of Technology, Stockholm, Sweden)

M.S. in Civil Engineering – KTH (The Royal Institute of Technology, Stockholm, Sweden)

License:

Registered Professional Engineer - Currently licensed in New York and Connecticut.

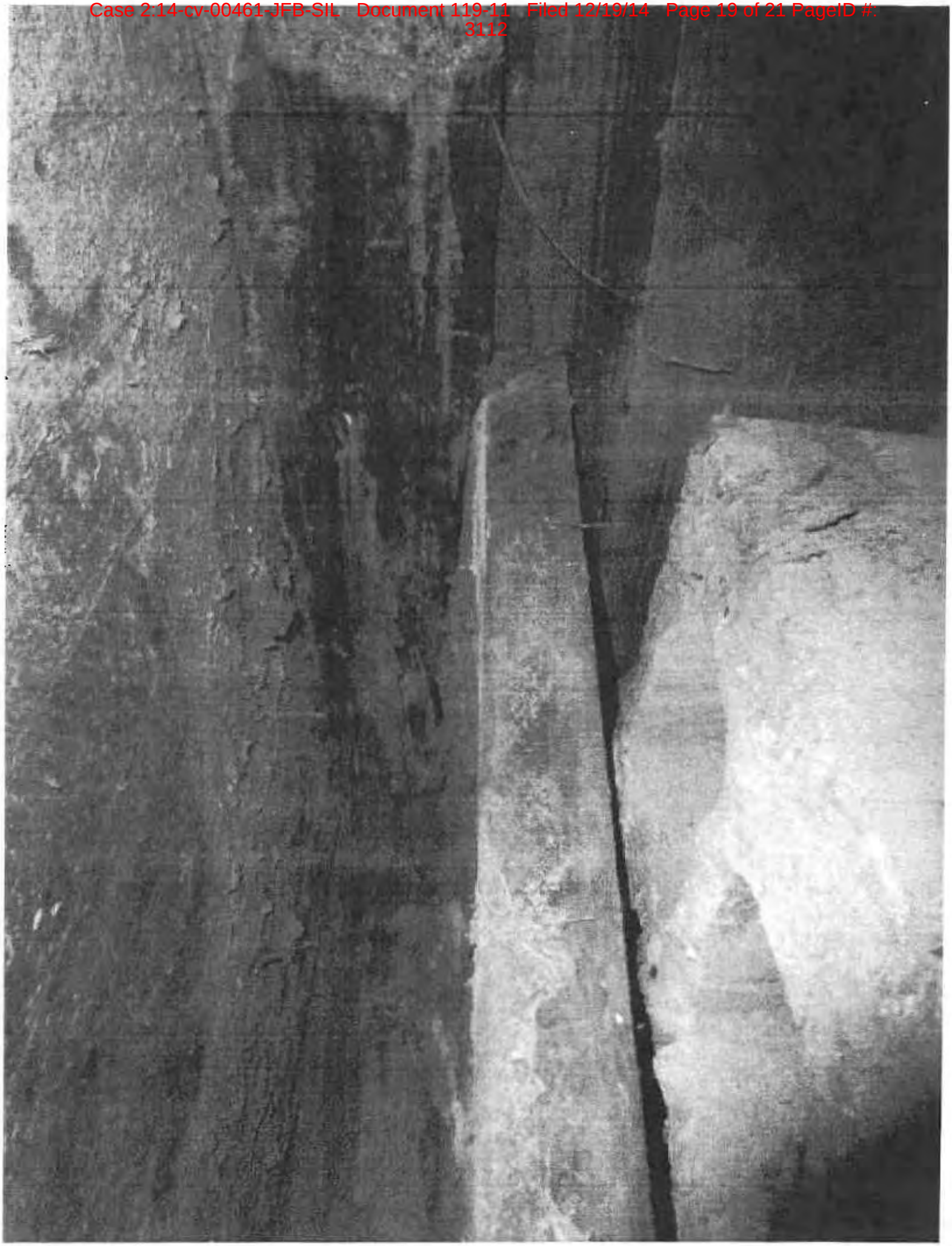
Member:

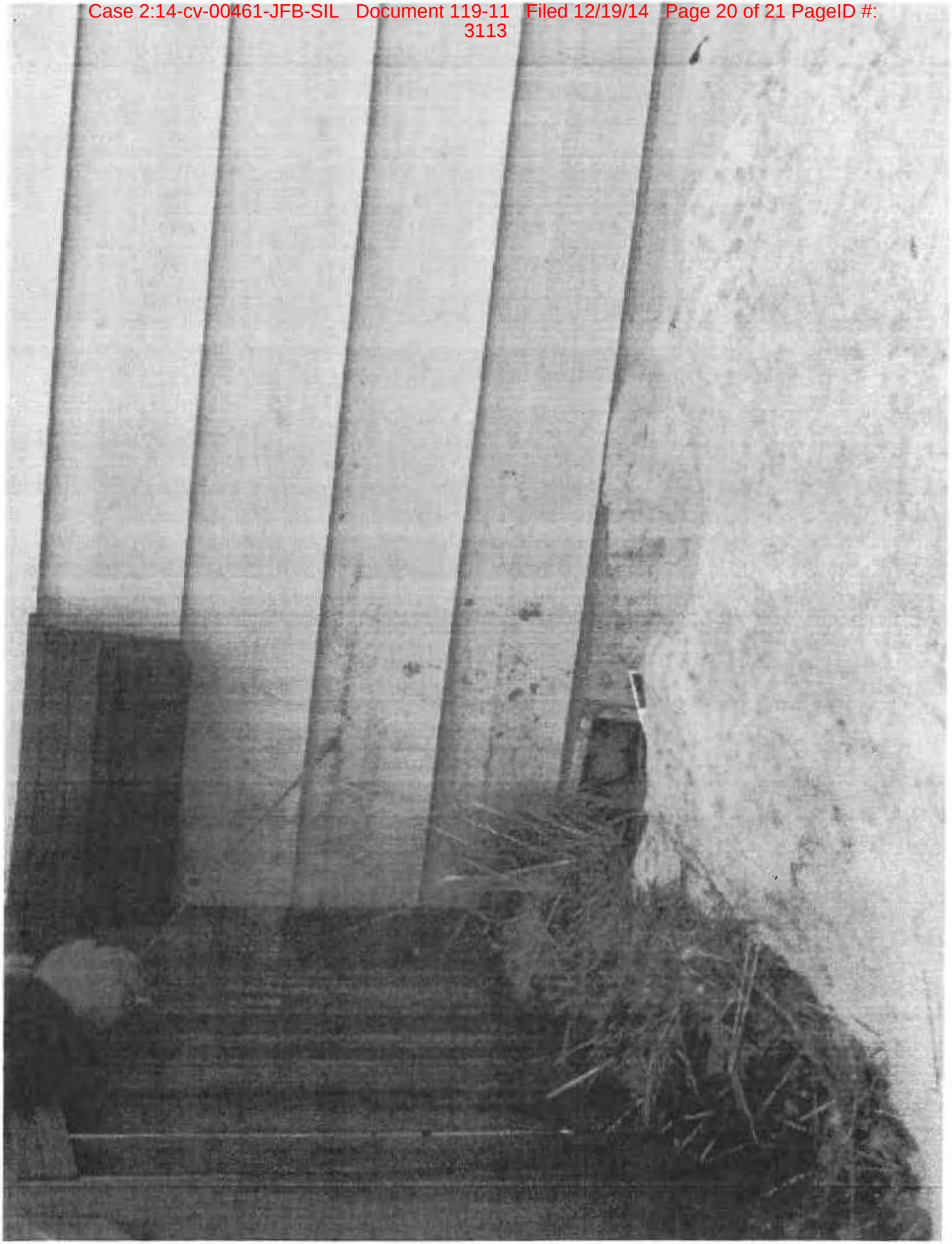
American Society of Professional Engineers
NYS Society of Professional Engineers

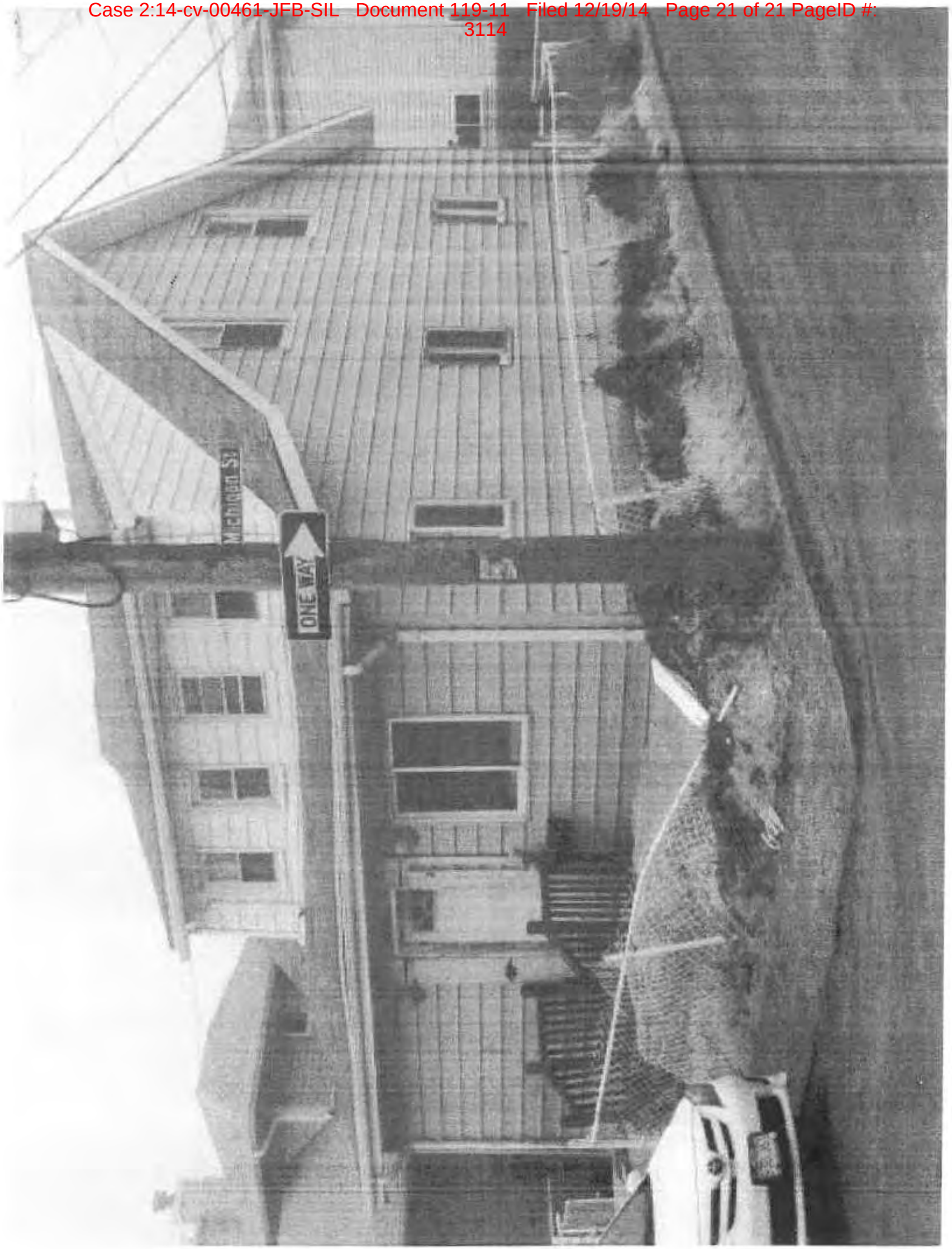
Research and Publications:

Mr. Hernemar investigated the capacity of bolted connections subjected to load causing plastic (irreversible) deformations. Mr. Hernemar did laboratory testing and also developed a computer program to calculate the load-deformation relationship of bolted connections taking into account the bolts specific nonlinear load-deformation relationship. Dissertation Project KTH (The Royal Institute of Technology), 1990. Publication titles: "Spikade knutförband i trätakstolar : deformation och bärförmåga", "Mekaniska forband i aluminium"

Mr. Hernemar researched the effect that inherent stresses in steel beams (originating from their cooling after being rolled) have on the ultimate load bearing capacity in cases when instability plays a major role, by performing geometric and material nonlinear computer simulations of such steel beams. The Technical University in Berlin, Germany, year 2000.



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ONE WAY